

ABSTRACT OF THE DISCLOSURE

A solid state image pickup device of high integration, high photoelectric conversion and high transfer performances is made of: a plurality of photoelectric conversion elements disposed in a matrix shape on the surface of a semiconductor

- 5 substrate, the photoelectric conversion elements in an even column being shifted by about a half of a photoelectric conversion element pitch in the even column from the photoelectric conversion elements in an odd column, and the photoelectric conversion elements in an even row being shifted by about a half of a photoelectric conversion element pitch in the even row from the photoelectric conversion elements in an odd row; a plurality of transfer channel regions formed on the semiconductor substrate, each being disposed near a corresponding photoelectric conversion element column, having a stripe plan shape, and extending and weaving along the column direction; and a plurality of transfer electrodes traversing the transfer channel regions and extending as a whole in the row direction, the transfer electrodes having
- 10 an overlap structure that end portions of adjacent transfer electrodes overlap to define a plurality of border lines of the transfer channel region, and defining a plurality of charge transfer sections partitioned by the border lines in the channel regions, wherein each transfer channel region includes a region where a plurality of charge transfer sections are juxtaposed along the row direction.
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